# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/785,596 | 02/23/2004 | Vishal Sinha | FOUND-0096 | 3221 |

| 49680          7590          04/03/2006 | EXAMINER |
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| THELEN REID & PRIEST LLP | KIM, WESLEY LEO |

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| P.O. BOX 640640 | 2617 | |
| SAN JOSE, CA 95164-0640 | | |

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) |
| | | 10/785,596 | SINHA, VISHAL |
| **Office Action Summary** | | Examiner | Art Unit | |
| | | Wesley L. Kim | 2617 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>31 January 2006</u>.

2a)☒ This action is **FINAL**.      2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-40</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-40</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>23 February 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some *　c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

This Office Action is in response to Amendment filed on 1/31/06.

- Claims 1, 12, 16, 21,23, 34, 38, 40 are currently amended.

- Claims 2-11, 13-15, 17-20, 22, 24-33, 35-37, 39 are in their original form.

- Claims 1-40 are pending in the current Office Action.

### *Response to Arguments*

1. Applicant's arguments with respect to claim 1-2, 7-8, 16, 23-24, 29-30, and 38 have

been considered but are moot in view of the new ground(s) of rejection.

Regarding independent claim 1 and 12, the applicant has amended the

claims such that the scope of the claims have been changed to overcome the

examiners application of the prior art in the previous rejection, therefore requiring

further search and consideration, the examiner would like to note that the prior

art has been re-applied in a manner which reads on the newly amended

independent claims 1 and 12.

With further regards to independent claim 1, the applicant alleges that the

purpose of removing is because the client has roamed away from the first switch

not merely to free-up resources. The examiner has The examiner would like to

note:

In response to applicant's argument that the references fail to show

certain features of applicant's invention, it is noted that the features upon

which applicant relies (i.e., the motivation) are not recited in the rejected

claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993), and

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation that the examiner has applied may not be the same as the one the applicant has suggested, however the motivation the examiner has provided is knowledge generally available to one of ordinary skill in the art, i.e. memory management.

With further regards to independent claim 12, the applicant alleges that the office action inappropriately mixes elements of Lee to teach the stated elements of claim 12, more specifically referring to the application of Col.9;57-61. The examiner respectfully disagrees. See Col.9;57-61 of Lee, which says a reply to a corresponding access point can indicate both a failure (Col.9;59-61, denial, i.e. failure) and an acceptance (Col.9;57-59, accept, i.e. success).

The applicant also alleges that the roam reply information regarding a client that is roaming to the switch is information that it does not have. The examiner respectfully disagrees. See Par.47 of Rue, the internet protocol address of the first mobile access server was not known, hence a find request message, and it is not meaningless header information. The IP address of the first mobile access server is required for the first switch to update information in the second switch so that the mobile node at the second switch may be provided with communication services.

2. Applicant's arguments filed 1/31/06 regarding claims 9-11, 20, 31-33, 37, and 39 have been fully considered but they are not persuasive.

- The applicant alleges that they are confused on how the office action can on the one hand say that Rue is silent on sending a roaming request to itself and then allege it would be obvious from only looking at Rue to modify rue to send a roam request to itself.

   The examiner notes that the term, "is silent on" is used to point out that Rue does not explicitly spell out exactly what is recited in the limitations, i.e. cannot be used as a 102 rejection; however, it is not saying that Rue cannot be applied at all. The examiner feels that the teachings of Rue (Par.45;4-7) can read on the limitations. Rue teaches that it checks its own database to see if it contains information on the mobile node, which can be interpreted as sending a roam request to itself before broadcasting roam requests to surrounding switches, because if the information is contained in its own

database, then broadcasting the roam requests are not necessary. The examiner notes that the claims do not say the roam requests are sent simultaneously.

- The applicant alleges that the switch in the Rue reference is mischaracterized and the switch that is being checked in the claim is the switch on the sending end, not the switch on the receiving end.

    The examiner respectfully disagrees. Rue teaches in paragraph 45;4-7 that the sending end, i.e. switch or mobile access server2 sends a roaming request to itself (See the above arguments) and to surrounding switches (Par.46;1-6, the Home mobile access server Find request message is the roaming request sent to surrounding switches, it is a roam request since it trying to obtain the IP address of the mobile node to provide communication services). Once more, the term, "is silent on" is used to point out that Rue does not explicitly spell out exactly what is recited in the limitations, i.e. cannot be used as a 102 rejection; however, it is not saying that Rue cannot be applied at all.

- The applicant alleges that the motivation for modifying Rue is not what is described in the specification. The examiner would like to note:

    In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the motivation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification,

limitations from the specification are not read into the claims. See *In re Van*

*Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993), and

In response to applicant's argument that there is no suggestion to

combine the references, the examiner recognizes that obviousness can only

be established by combining or modifying the teachings of the prior art to

produce the claimed invention where there is some teaching, suggestion, or

motivation to do so found either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art. See *In re*

*Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958

F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation that

the examiner has applied may not be the same as the one the applicant has

suggested, however the motivation the examiner has provided is knowledge

generally available to one of ordinary skill in the art.

## *Claim Rejections - 35 USC § 112*

The examiner notes that the arguments with regard to the previous 112 2$^{nd}$ rejections

applied to claims 5, 6, and 18 have been considered and are accepted by the examiner,

therefore the 112 2$^{nd}$ rejections in the previous office action is withdrawn.

## *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-2, 7-8,16, 23-24, 29-30, and 38 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Lee et al (U.S. Patent 6535493 B1).

**Regarding Claims 1, 16, 23, and 38**, Lee teaches handling a roam

request at a first switch (<u>Col.8;13-14, registration request is roam request and</u>

<u>home agent is first switch</u>), the roam request sent by a second switch and

containing information about the client that is roaming to the second switch

(<u>Col.8;8-12, second switch is the foreign agent</u>), the method comprising:

storing information regarding the client (<u>Col.6;15-19, obvious the home</u>

<u>agent, i.e. first switch, stores information regarding the client after completing</u>

<u>association handshake</u>);

receiving the roam request after said storing (<u>Col.8;8-12, handshake is</u>

<u>complete, i.e. information is stored, therefore roam request is after storing</u>);

determining if the first switch is a home agent for the client (<u>Col.6;35-40, it</u>

<u>is determined that the first switch is a home agent therefore data is tunneled to</u>

<u>the mobile station from the home agent</u>);

tunneling traffic for the client to the second switch if the first switch is a

home agent for the client (<u>Col.6;35-40, data is tunneled to the mobile station from</u>

<u>the home agent</u>); and

sending a roam reply to the second switch (<u>Col.8;13-14 home agent, i.e.</u>

<u>first switch, send reply to foreign agent, i.e. second switch</u>), however Lee **is**

**silent on** removing the stored information regarding the client from the first

switch if the first switch is not a home agent for the client.

Lee teaches if the foreign agent is no longer the current foreign agent for the client, then the stored/received information, i.e. datagram, is discarded (Col.10;7-12). To the examiner, this reads on the limitation "removing the stored information regarding the client from the first switch if the first switch is not a home agent for the client" since both Lee and the limitation teach discarding information regarding a client if the client is no longer associated with a specific switch, i.e. agent.

To the examiner, it would have been obvious to modify Lee at the time of the invention, such that the stored information regarding the client is removed from the first switch if the first switch is not a home agent for the client, to provide a method of freeing-up memory from the associated switch, which the client roamed away from, consistent with high level concepts for memory management.

**Regarding Claims 2 and 24**, Lee teaches all the limitations as recited in claim 1 and 23, respectively, and Lee further teaches roam reply contains network configuration information regarding the client (Col.9;46-49, the reply contains information regarding whether or not the client registration request has been accepted or denied, which is network configuration information).

**Regarding Claims 7 and 29**, Lee teaches all the limitations as recited in claim 1 and 23, respectfully, and Lee further teaches that a roam reply indicates failure if something went wrong during the process, otherwise it indicates success (Col.8;13-15, roam request granted indicates success, roam request denial indicates failure).

**Regarding Claims 8 and 30**, Lee teaches all the limitations as recited in claim 1 and 23, respectfully, however Lee **is silent on** the roam request is an Inter Switch Roaming Protocol (ISRP) roam request.

Lee teaches a registration request (i.e. roaming request) is a UDP protocol registration request (Col.10;35-45). One of ordinary skill in the art would find it obvious to use an alternative protocol well known in the art, an inter-switch link protocol (i.e. ISRP), for routing data between VLAN switches.

2.  Claims 9-11, 20, 31-33, 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rue (U.S. Pub. 2003/0185172 A1).

**Regarding Claims 9, 20, 31, and 39**, Rue teaches receiving a move request (Par.44;9-12, handover request message) from an access point (Par.44, fourth access point) associated with the switch (Par.45; second mobile access server); and sending a roam request to all peer switches in the same mobility domain as the switch (Par.46;1-6). To the examiner a home mobile access server find request message (MAS) is a roam request since both are trying to obtain information on the mobile node from the home switch so that data may appropriately be routed to the roaming mobile node, however Rue **is silent on** sending a roaming request to itself.

Rue teaches that the switch itself is checked to determine if information on the mobile node is stored in the database (Par.45;4-7, i.e. a roam request is sent to itself).

To one of ordinary skill in the art, it would have been obvious to modify Rue, such that a roaming request is sent to itself, to provide a method of obtaining information on the mobile node from its home switch, where the switch may or may not be the home switch, so that data may appropriately be routed to the roaming mobile node.

**Regarding Claims 10, 11, 32, 33, and 37**, Rue teaches all the limitations as recited in claim 9, 31, and 33, and although Rue **is silent on** the move request being a Switch Access Point Protocol (SAPP) move request or ISRP roam request.

Rue teaches the mobile access server (i.e. switch) controls access points and supports signal protocol (Par.27;10-11). To one of ordinary skill in the art, it is obvious that signal protocol used for the roam request may be of type Switch Access Point Protocol (SAPP) or ISRP.

3.  Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rue (U.S. Pub. 2003/0185172 A1) in view of Lee et al (U.S. Patent 6535493 B1) and Edney et al (U.S. Pub. 2004/0255033 A1).

**Regarding Claim 35**, Rue teaches all the limitations as recited in claim 33, however Rue **is silent on** means for trapping all address resolution protocol (ARP) packets from the client; and means for sending an ARP reply to the client with a default router address for the switch.

Lee teaches trapping all address resolution protocol packets from the

client (Col.11;30-32) and means for sending an ARP reply to the client with a

default router address for the switch (Col.11;20-22).

Edney teaches a client device sending a ARP Request an access point

and sending a ARP reply back to the client device (Par.29;6-10).

To one of ordinary skill in the art it would have been obvious to modify,

Rue with Lee and Edney, since they are from similar search areas, transmitting

data packets over wireless local area networks, such that there exists a means

for trapping all address resolution protocol (ARP) packets from the client; and

means for sending an ARP reply to the client with a default router address for the

switch, to provide a method of securely transmitting data to appropriate

destinations.

4.  Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rue (U.S.

    Pub. 2003/0185172 A1) in view of Lee et al (U.S. Patent 6535493 B1).

    **Regarding Claim 36**, Rue and Lee teach all the limitations as recited in

    claim 33, however the combination **is silent on** the move reply including a new

    VLAN identification.

    Eglin teaches updating includes updating a virtual local area network

    (VLAN) tag corresponding to the client with a new VLAN tag corresponding to a

    new VLAN to which the client has roamed (Par.28;22-26, VLAN tag is changed).

    To one of ordinary skill in the art, it would have been obvious to modify

    Rue and Lee, such that a virtual network tag corresponding to the client in a data

structure controlled by the first switch is updated if the first switch is the same as

the second switch, to provide a method of maintaining updated connectivity of

the mobile devices by updating the VLAN tag and associating it to the correct

VLAN.

5.  Claims 3-6,17-19, and 25-28 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lee et al (U.S. Patent 6535493 B1) in view of Eglin (U.S.

Pub.2003/0210671 A1).

   **Regarding Claims 3, 17, and 25**, Lee teaches all the limitations as

recited in claim 1,16, and 23, respectively, and Lee teaches discovering if the first

switch is the same as the second switch (<u>Col.8;30-32</u>); performing said

determining, removing, and tunneling only if the first switch is not the same as

the second switch (<u>See Claim 1 rejection</u>); setting the first switch as the foreign

agent if the first switch is the same as the second switch (<u>Col.8;23-25, the foreign</u>

<u>agent is dynamically assigned, to a skilled artisan, it is obvious that the first</u>

<u>switch will be set as a foreign agent even if it is the same as the second switch</u>);

however Lee **is silent on** and updating a virtual network tag corresponding to the

client in a data structure controlled by the first switch if the first switch is the same

as the second switch.

   Eglin teaches the access port/VLAN may change when the mobile station

roams between AP reception areas, e.g. from first access point to another

access point and if the access port/VLAN is unchanged (i.e. meaning the first

and the second switch are the same), then a data packet is updated with the

appropriate VLAN tag and switched to the appropriate identified core port

(Par.28;16-22).

To one of ordinary skill in the art, it would have been obvious to modify

Lee, such that a virtual network tag corresponding to the client in a data structure

controlled by the first switch is updated if the first switch is the same as the

second switch, to provide a method of maintaining updated connectivity of the

mobile devices by updating the VLAN tag and associating it to the correct VLAN.

**Regarding Claims 4 and 26,** the combination as discussed above

teaches all the limitations as recited in claim 3 and 25, respectively, and Eglin

further teaches updating includes updating a virtual local area network (VLAN)

tag corresponding to the client with a new VLAN tag corresponding to a new

VLAN to which the client has roamed (Par.28;22-26, VLAN tag is changed).

**Regarding Claims 5, 18, and 27,** the combination as discussed above

teaches all the limitations as recited in claim 3, 17, and 25, respectively, and Lee

further teaches ascertaining if the roaming being attempted is layer 2 or layer 3

roaming (Col.8;30-35); executing said performing and setting only if the roaming

being attempted is layer 3 roaming (See Claim 3 rejection, performing and setting

only performed when mobile device roams to an access point in a foreign

network, which is layer 3 roaming), and removing information regarding the client

from a data structure controlled by the first switch (See rejection of Claim 1).

**Regarding Claims 6, 19, and 28,** the combination as discussed above

teaches all the limitations as recited in claim 5,18, and 27, respectively, and Lee

teaches checking if the client is known to the first switch (<u>See Claim 1 rejection</u>);

performing said discovering, executing, and removing only if the client is known

to the first switch (<u>See Claim 5 rejection, discovering, executing, and removing</u>

<u>only done if first switch is home agent to the client, i.e. client is known to the first</u>

<u>switch</u>).

6.  Claims 12,15, 21, 34, and 40 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lee et al (U.S. Patent 6535493 B1) in view of Rue (U.S. Pub.

2003/0185172 A1) and Strachan et al (U.S. Pub 2004/0105440 A1).

**Regarding Claims 12, 21, 34, and 40**, Lee teaches handling a roam reply

at a switch (<u>Col.8;13-15, foreign agent handles roam reply</u>), receiving the roam

replay (<u>Col.8;13-15, foreign agent handles roam reply, reply is received</u>)

determining if the roam reply indicates that the handling of a roam request was

successful (<u>Col.9;57-61, sends a predetermined code to allow determination of</u>

<u>success or failure of roam request</u>); sending a reply to a corresponding access

point indicating failure if the handling of said roam request was not successful

(<u>Col.9;57-61, sends a code specifying reason of denial</u>); setting the switch as a

Foreign Agent for the client if the handling of said roam request was successful

(<u>Col.8;32-34, when mobile unit moves to a new subnet, (i.e. under the control of</u>

<u>a new router or switch) other than its home (i.e. home router or switch), this new</u>

<u>subnet (i.e. the new switch) becomes its foreign subnet, i.e. foreign agent</u>); and

sending a move reply to said corresponding access point if the handling of said

roam request was successful (<u>Col.8;13-15</u>), however Lee **is silent on** the roam

reply having information regarding a client that is roaming to the switch, the

information not previously available at the switch; and switching a router

designated by the client with a default router for the switch if the handling of said

roam request was successful.

Rue teaches the roam reply having information regarding a client that is

roaming to the switch, (Par.52;7-12 and Par.53;5-11, internet protocol address of

the mobile node (i.e. client) is information regarding the client), the information

not previously available at the switch (Par.47, the internet protocol address of the

first mobile access server was not known, hence a find request message);

Strachan teaches switching a router designated by the client with a default

router for the switch if the handling of said roam request was successful (Par.28

and Par.42, the edge switch is the designated router and the core router is the

default router).

To one of ordinary skill in the art it would have been obvious to modify Lee

with Rue and Strachan, since they are from the same search areas, viz.

supporting mobility between subnetworks, such that the roam reply has

information regarding a client that is roaming to the switch, the information not

previously available at the switch; and switching a router designated by the client

with a default router for the switch if the handling of said roam request was

successful, to provide a method of enabling seamless roaming of mobile devices

among wireless networks.

**Regarding Claim 15**, the combination as discussed above teaches all the limitations as recited in claim 12, however the combination **is silent on** move reply being a SAPP move reply.

Rue teaches the mobile access server (i.e. switch) controls access points and supports signal protocol (Par.27;10-11). To one of ordinary skill in the art, it is obvious that signal protocol used for the roam request may be of type Switch Access Point Protocol (SAPP).

7. Claims 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (U.S. Patent 6535493 B1), Rue (U.S. Pub. 2003/0185172 A1), and Strachan et al (U.S. Pub 2004/0105440 A1) in further view of Edney et al (U.S. Pub. 2004/0255033).

**Regarding Claims 13 and 22**, Lee, Rue, and Strachan teach all the limitations as recited in claim 12 and 21, respectively, however the combination **is silent on** trapping all address resolution protocol (ARP) packets from the client; and sending an ARP reply to the client with a default router address for the switch.

Lee teaches trapping all address resolution protocol packets from the client (Col.11;30-32) and means for sending an ARP reply to the client with a default router address for the switch (Col.11;20-22).

Edney teaches a client device sending a ARP Request an access point and sending a ARP reply back to the client device (Par.29;6-10).

To one of ordinary skill in the art it would have been obvious to modify, Lee, Rue, and Strachan with Edney, since they are from similar search areas, transmitting data packets over wireless networks, such that there exists a means for trapping all address resolution protocol (ARP) packets from the client; and means for sending an ARP reply to the client with a default router address for the switch, to provide a method of securely transmitting data to appropriate destinations.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (U.S. Patent 6535493 B1), Rue (U.S. Pub. 2003/0185172 A1), and Strachan et al (U.S. Pub 2004/0105440 A1) in further view of Eglin (U.S. Pub. 2003/0210671 A1).

**Regarding Claim 14**, Lee, Rue, and Strachan teach all the limitations as recited in claim 12, however the combination **is silent on** the move reply includes a new VLAN identification.

Eglin further teaches updating includes updating a virtual local area network (VLAN) tag corresponding to the client with a new VLAN tag corresponding to a new VLAN to which the client has roamed (Par.28;22-26, VLAN tag is changed).

To one of ordinary skill in the art, it would have been obvious to modify Lee, Rue, and Strachan, such that a virtual network tag corresponding to the client is changed, to provide a method of maintaining updated connectivity of the mobile devices by changing the VLAN tag and associating it to the correct VLAN.

*Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
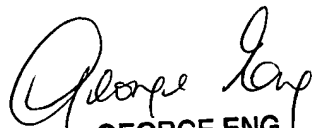
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley L. Kim whose telephone number is 571-272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WLK

GEORGE ENG
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